

## **DISPENSING CONTAINER WITH SIDE OPENING**

### **FIELD OF THE INVENTION**

**[0001]** The present invention relates to a food package storage and dispensing container, and in particular, such a container with a side opening flap.

### **BACKGROUND OF THE INVENTION**

**[0002]** Food products such as cookies and other snacks may be packaged in individual single serving snack packages for convenience. These single serving snack packages may be displayed on store shelves in a box container with a removable, cut-away or otherwise openable top, thereby allowing a customer to select individual food packages from the box container for individual purchase. Alternatively, a consumer may purchase the entire box container of food packages. One disadvantage of conventional box containers is that once the top is removed or opened, the structural integrity of the box container is compromised, thereby limiting the utility of a box container for transporting and storing the remaining food packages.

**[0003]** Other disadvantages of some other conventional containers are that they are not convenient and are not designed for the storage dispensing and transport of food packages. For example, such containers may lack a reclosable opening which opens to gain access to the food contents inside and then closes after some of the food contents have been removed. Therefore, these containers fail to be suitable to dispense and transport food packages once these containers have been opened.

**[0004]** Some conventional box containers have side access openings in the form of an upwardly extending flap which folds down and out from the container, thereby allowing access to the contents inside the container. Typically, these dispensing containers with upwardly extending flaps are used to dispense stacked items such as beverages as disclosed in U.S. Patents Nos. 3,894,681 to Arneson et al and 4,498,581 to Dutcher or planar articles such as diapers as disclosed in U.S. Patent No. 4,252,236 to Roccaforte.

**[0005]** These aforementioned dispensing containers with side flaps are not ideally suited for storing and dispensing food packages since they fail to provide an adequate structure to retain the remaining food packages once the dispensing container has been opened since the upwardly extending flap will remain down and thereby possibly lead to inadvertent spilling of food packages out of the dispensing container.

**[0006]** Due to these and other limitations with present containers, a need exists for a food storage and dispensing container which provides structural integrity once the container is opened and also provides adequate protection against inadvertently dropping food packages from the container is needed.

**[0007]** There is also a need for a convenient storage, dispensing and transport container for food products such as snack food packages.

## **SUMMARY OF THE INVENTION**

**[0008]** The purpose of the present invention is to provide a new and improved box container for individual food products such as snack packages, in which the container provides structural integrity once opened, while concurrently facilitating the

individual removal of food packages from the box container which has a re-closeable side opening, thereby limiting inadvertent spillage of food packages from a once opened container.

**[0009]** This purpose is achieved, in part, by providing a suitable container for individual food packages in combination with a side opening defined by a downwardly extending U-shaped path of a weakened line forming a flap. The U-shaped path of the weakened line can be completely curved path or the path may have right angles so long as the path extends down and then back up. Once the weakened line is broken, the flap turns about a transverse line located above the flap. As a result of the flap's configuration, in the absence of an object passing through the opening, the flap naturally turns about the transverse line via its own weight and the resiliency of the material of which the container is formed to extend generally downwardly to generally cover the opening.

**[0010]** In various further alternative forms of the container, the transverse line is below a junction of the top and the side having the flap, and a plurality of food packages are disposed inside the container wherein the packages are of a size to be retrieved individually through the opening.

#### BRIEF DESCRIPTION OF THE DRAWINGS

**[0011]** The invention will now be described in detail with respect to preferred embodiments with reference to the accompanying drawings, wherein:

**[0012]** Figure 1 is a perspective view of a food package storage and dispensing container in a closed configuration in accordance with the present invention;

**[0013]** Figure 2 is a perspective view of the container of Figure 1 in a partially opened configuration;

**[0014]** Figure 3 is a sectional view of the container of Figure 1 in an opened configuration and showing a hand gaining access to the contents of the package; and

**[0015]** Figure 4 is a perspective view of a different food package storage and dispensing container in accordance with the present invention in a closed configuration.

#### DETAILED DESCRIPTION OF THE INVENTION

**[0016]** Referring now to the drawings, like numbers represent like elements throughout the several views.

**[0017]** Referring now specifically to Figures 1-3, a rectangular box-like container 10 has a top 12, bottom 14, and two pairs of opposing sides 16, 18 and 20, 22. Top 12 is formed of a single panel that substantially forms the entire top surface 50 of container 10. As a result, top surface 13 provides a continuous uninterrupted surface for graphics or other indicia.

**[0018]** Side 16 has an openable line defined by perforations 24 (indicated by a dashed line in Figure 1) in the shape of a downwardly extending U-shaped path. A transverse fold line 26 extends along the length of the side 16 spanning between perforation end 24a and perforation end 24b.

**[0019]** Although the openable line of perforations 24 is a symmetrical arc path, the operable line can be any downwardly extending U-shaped path. For example, the U-shaped path may be composed of two substantially vertical portions connected by a substantially horizontal portion thereby defining a U-shaped path having right angles.

Alternatively, the U-shaped path can have any shape so long as the U-shaped path extends below and connects to the ends of the transverse fold line 26.

**[0020]** Flap 28 is formed by tearing the side 16 along the perforations 24 as depicted in Figure 2. The flap 28 turns upwardly about the transverse line 26 and forms an opening 30 in the container 10 having a sufficient size for a human hand to reach through. Flap 28 can be pivoted, i.e., turned either inward towards the center of the box-like container 10, depicted as flap 28b in Figure 3, drawn with broken lines, or outwards away from the box-like container 10 as shown at flap 28a of Figures 2 and 3, drawn with solid lines.

**[0021]** After flap 28 has been turned upwardly about transverse line 26, a plurality of food packages such as snack packages 32 become hand accessible for individual retrieval through opening 30. The snack packages may be a plastic, foil or other bag-like structure containing the food product. The body of container 10 is formed of a suitable material such as cardboard which acts with the composition and the quantity of the bag-like food packages to advantageously accommodate turning of flap 28.

**[0022]** After one has reached one's hand 34 into the container 10 and removed a snack package 32 from the container 10, flap 28 naturally turns about the transverse line 26 to extend generally downwardly to generally cover the opening 30. The natural turning of flap 28 occurs via the mass of flap 28. Since the flap is pivotally connected to the side 16 from above the flap 28, the force of gravity and the resilient memory of the flap to return to its original position urge the flap 28 downward to generally cover the opening 30. The closing of the opening 30 via the flap 28 can be further assisted by one's hand 34.

**[0023]** After flap 28 is returned to substantially cover the opening 30, the weight of the flap 28 and its resilient memory prevent flap 28 from turning, thereby preventing remaining snack packages 32 from inadvertently falling or spilling out of container 10 when container 10 is transported or otherwise disturbed.

**[0024]** A pair of handles, including handle 38 formed in side 20 and a corresponding handle (not shown) formed in side 22 provide structures for one to grasp and use to transport the container 10. Handle 38 is formed in side 20 via perforations 40 which, once separated, forms a flap 42 which pivots along fold line 44 thereby forming a slot 46 which acts as a handle for one to grasp. As a result, one can use handle 38 along with a similar handle formed in side 22 to transport container 10. Top 12 is preferably permanently affixed to container 10 via glue or other suitable material including staples.

**[0025]** The container of the present invention can have many different shapes. As one example of a different shape, Figure 4 depicts a dispensing container 410 similarly numbered as container 10 with the numerals raised by 400. Container 410 differs from container 10 in that container 410 has a polygonal shape body rather than the rectangular shape. Other than the different shape, in all other aspects, container 410 is configured and operates identically to that of container 10 with flap 428 formed by opening side 416 along perforation line 424. Turning flap 428 along transverse line 426 provides an opening to container 410. The opening allows one to withdraw individual food packages from inside container 412. Like container 10, one may easily transport container 412 using slot handle 438 formed in side 420 and a similarly formed handle formed in side 422.

**[0026]** It will now be apparent to one of ordinary skill in the art that containers 10, 410 offer substantial features and advantages not found in previous snack package dispensing containers. The present containers provide a reclosable flap 28, 428 which pivots to close an opening and thereby prevents remaining food products from inadvertently spilling out of the container. Further, the non-opening top provides rigidity to the containers which assists in providing support and integrity for storing and transporting the containers. As a result, the containers are highly adaptable for transporting the food products such as snack packages and dispensing the food products on location such as tailgate parties, children's sporting events, picnics, and the like. Further, the reclosable flap 28, 428 provides for a container well suited and convenient for toting any remaining snack packages home again from such events as the flap 28, 428 will help prevent snack packages from inadvertently spilling out of the container.

**[0027]** Although the invention has been described in detail with respect to the preferred embodiments thereof, it will be apparent to one of ordinary skilled in the art that the invention is capable of numerous modifications and variations within the scope and spirit of the invention.